

Brown Marmorated Stinkbug Survey Work Plan - Calendar Year 2012

Cooperator:	Kansas Department of Agriculture		
State:	Kansas		
Project:	Brown Marmorated Stinkbug		
Project funding source:	Priority Survey <input type="checkbox"/> State Discretionary Survey <input checked="" type="checkbox"/> Other Line Item Pest <input type="checkbox"/>		
Project Coordinator:	Laurinda Ramonda		
Agreement Number	12-8420-1227-CA		
Contact Information:	Address:	PO Box 19282, Forbes Field, Bldg 282, Topeka, Kansas 66619	
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This Work Plan reflects a cooperative relationship between the Kansas Department of Agriculture (KDA) (the Cooperator) and the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ). It outlines the mission-related goals, objectives, and anticipated accomplishments as well as the approach for conducting a Brown Marmorated Stinkbug survey and control program and the related roles and responsibilities of the Kansas Department of Agriculture and USDA-APHIS-PPQ as negotiated.

I) OBJECTIVES AND NEED FOR ASSISTANCE

The brown marmorated stink bug (BMSB) was first found in Allentown, Pennsylvania in 2001. BMSB will feed on a wide variety of shade and fruit trees, vegetables and legumes. This pest could become a major agricultural pest in the United States which could cause crop loss and economic hardship in Kansas.

States where this pest has been found, as of May 2011, are: California, Connecticut, Delaware, Florida, Indiana, Kentucky, Maine, Maryland, Massachusetts, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, Washington and West Virginia. BMSB is established mostly on the east coast and Oregon.

As BMSB expands its range, it is possible for it to invade agricultural areas and cause a risk to various crops. There is great concern if BMSB (#27 on state pest list) becomes established in Kansas that it would have an impact on our crop production and the economics of our state. Kansas has not found this pest and there is great need to identify the range of this pest.

Without funding from USDA, the Kansas Department of Agriculture will be unable to conduct a survey for the brown marmorated stinkbug.

II) RESULTS OR BENEFITS EXPECTED

The Cooperator seeks to conduct a program which is expected to result in:

A. What results or benefits will be derived from the cooperative effort? Use of bulleted Statements is acceptable.

- Early detection and possible containment of the brown marmorated stinkbug, if found.
- Identification of damage caused to crops, if found.
- Identification of high risk pathways.
- Provide the Kansas Department of Agriculture, USDA-APHIS-PPQ, and surrounding states with information regarding the status of this pest.
- Additional geographic assessment from data gathered.

III) APPROACH

What is the plan of action or approach to the work?

Traps and lure will be utilized in high risk areas for Brown Marmorated Stink Bug (*Halyomorpha halys*). High risk areas could include live plant dealers, orchards, retail centers and warehouses.

Trapping will be in August and September. Fifty traps will be placed at 25 sites. Two traps will be placed at each high risk location. Lure should be changed every 30 days. Trapping will take place in the north east part of the state. Possible counties: Anderson, Atchison, Brown, Chase, Clay, Cloud, Coffey, Dickinson, Doniphan, Douglas, Franklin, Geary, Jackson, Jefferson, Johnson, Leavenworth, Linn, Lyon, Marshall, Miami, Morris, Nemaha, Osage, Ottawa, Pottawatomie, Republic, Riley, Saline, Shawnee, Wabaunsee, Washington, and Wyandotte.

A. The Cooperator and APHIS Mutually Agree to/that:

- Utilize Cooperator and APHIS program funding, as outlined in the Financial Plan, within the authorized parameters to support survey, detection and objectives.
- Maintain a State Cooperative Agriculture Pest Survey committee that will meet at least once a year.
- Work together in carrying out field surveys, trapping and data collections, emphasizing pest and diseases that may pose an immediate risk to the agriculture of the state and United States.
- Have representation at national and/or Regional annual meetings.

1. What is the quantitative projection of accomplishments to be achieved?

- a. By activity or function, what are the anticipated accomplishments by month,**

quarter, or other specified intervals?

- Trapping will occur during August and September with traps removed in October.
- Traps checked and lure changed monthly.
- Fact sheets, webpage, resources, and pest reporting will be continually updated as new information becomes available.
- Data will be entered into the IPHIS, if available, if not then NAPIS database when pest identification is confirmed and/or becomes available.
- GPS coordinates will be included with surveys.
- Survey and identification of the Brown Marmorated Stink Bug.
- Suspect specimens in traps will be forwarded to a qualified identifier.

b. What criteria will be used to evaluate the project? What are the anticipated results and successes?

- Pest detection survey activities completed.
- All data collected from the pest detection survey is entered into a PPQ approved database.
- SPHD, SPRO, PSS, SSC meetings to keep updated on issues, if needed.
- Presence or absence of the Brown Marmorated Stink Bug.
- Better knowledge of high risk sites.

c. What methodology will be used to determine if:

1. Identified needs are met

- Survey completed within timeframe specified.

2. Results and benefits are achieved

- Review of the IPHIS, if available, if not then NAPIS database to ensure that data from the pest detection activities have been entered.
- Review of the accomplishment reports, supporting outreach materials (if applicable), and maps.
- SPHD, SPRO, PSS, SSC meetings to keep updated on issues.

2. What type of data will be collected and how will it be maintained?

a. Address timelines for collection and recording of data.

All survey data from cooperative agreements involving pest surveys will be entered by the State Survey Coordinator or KDA staff into the IPHIS, if available, if not then NAPIS database to include but not limited to observation number, observation date, data source, state/county, site code, pest code, pest status, and survey method.

The data entry requirements are:

- Enter new national, state, and county records into IPHIS, if available, if not then NAPIS database within 48 hours of confirmation of a pest or pathogen identification by a recognized identifier.
- Non-time sensitive records, including negative data, must be entered into IPHIS, if available, if not then NAPIS within 2 weeks of confirmation.
- Negative data will be entered within 2 weeks of decommissioning a trap, obtaining the results from an identifier, or performing a laboratory assay.
- Survey data will be collected with GPS technology for internal pathway analyses. Survey maps will be developed from approved GIS mapping software.

b. How will APHIS be provided access to the data?

- Complete, accurate, and timely pest survey data will be entered into IPHIS, if available, if not then NAPIS using approved protocol and accessible.
- Semi-annual and annual survey reports submitted to Western Region.

B. The Cooperator will:

- Document locations by GPS coordinate.
- Equipment used in this survey will be maintained by cooperator upon completion of project.
- Conduct surveys in high risk areas during August and September 2012.
- Hire temporary/seasonal staff to set up and monitor traps.
- Supply GPS equipment.
- Provide KDA staff when needed.
- Provide vehicle and fuel for travel for conducting survey and collecting data.
- Provide lodging when needed.

1. By function, what work is to be accomplished?

- Trapping for the Brown Marmorated Stink Bug will occur from August through September with lure replacement at 30 days.
- Survey and trapping will be done with temporary/seasonal help and KDA full time employees when needed. Temp employees will be trained and monitored by the State Survey Entomologist and State Survey Coordinator.
- Data will be entered into the IPHIS, if available, if not then NAPIS database when pest identification is confirmed and/or becomes available.
- GPS coordinates will be included with surveys.
- Suspect specimens in traps will be sent to a qualified identifier.

2. What resources are required to perform the work?

- Qualified identifier for identification.
- Temporary/seasonal employees to be hired through CAPS survey to conduct survey.

- KDA permanent staff will help when needed for collection and training.
- GPS unit and map for locations.
- Rental vehicle and fuel required set up and monitor traps.
- Provided by Cooperator, office space with associated services and utilities, computers and other office equipment for the use of Cooperator personnel. These include digital camera, GPS unit and computer with internet service. Computers will be used for entering survey data into the state survey database and IPHIS, if available, if not then NAPIS database.

3. What numbers and types of personnel will be needed and what will they be doing?

- Temporary/seasonal and permanent KDA staff will be setting and checking traps.
- Data acquired will be entered into IPHIS, if available, if not then NAPIS by State Survey Coordinator or KDA staff.
- KDA staff will help when needed for collection and/or sorting and training.
- Qualified identifier for specimen identification.

4. What equipment will be needed to perform the work? Include major items of equipment with a value of \$5,000 or more.

a. What equipment will be provided by the cooperator? N/A

b. What equipment will be provided by APHIS? N/A

c. What equipment will be purchased in whole or in part with APHIS funds? N/A

d. How will the equipment be used? N/A

e. What is the proposed method of disposition of the equipment upon termination of the agreement/project? N/A

5. Identify information technology equipment, e.g., computers, and their ancillary components.

Provided by KDA, office space with associated services and utilities, computers and other office equipment for the use of Cooperator personnel. These include digital camera, GPS unit, PDA and computer with internet service.

6. What supplies will be needed to perform the work?

- Traps
- Lure
- Hand lenses
- Specimen jars
- Shipping boxes
- Insect repellent

- Alcohol
- Alcohol proof pens
- Insect pins
- Fuel for rental vehicle
- GPS units and digital camera

a. What supplies will be provided by the Cooperator?

- GPS units and digital camera
- Hand lenses

b. What supplies will be provided by APHIS?

- None

c. What supplies will be purchased in whole or in part with APHIS funds?

- Traps
- Lure
- Supplies for the collection of specimens (specimen jars, shipping boxes, insect repellent, alcohol proof pens, insect pins).
- Supplies for shipping specimens (shipping boxes).
- Fuel for rental vehicle

d. How will the supplies be used?

- Planning, implementation, data collection and data submission of survey.
- Pest detection survey work.
- Shipping of specimens to identifiers or labs.

e. What is the proposed method of disposition of the supplies with a cumulative value over \$5,000 upon termination of the agreement/project?

- There should not be any.

7. What procurements will be made in support of the funded project and what is the method of procurement (e.g., lease, purchase)?

- The Fiscal Department at the Kansas Department of Agriculture will provide most contracts.
- Temporary staffing/seasonal staffing will be employed by KDA.
- Most procurements will be made by purchase order.
- Some procurements will be made reimbursable personal expense.

8. What are the travel needs for the project?

- a. **Is there any local travel to daily work sites? Who is the approving official? What are the methods of payment? Indicate rates and total costs in the Financial Plan.**
 - Travel will be required to survey sites by use of a rental vehicle.
 - The KDA Plant Protection and Weed Control Plant Program Manager is the approving official.
 - Costs are included in the financial plan.
- b. **What extended or overnight travel will be performed (number of trips, their purpose, and approximate dates). Who is the approving official? What is the method of payment? Indicate rates and total cost in the Financial Plan.**
 - No overnight travel is anticipated.
 - The KDA Plant Protection and Weed Control Plant Program Manager is the approving official.
 - Costs are included in the financial plan.
- c. **What is the method of payment? Indicate rates and total cost in the Financial Plan.**
 - Purchase order

9. Reports:

- a. Submit all reports to the APHIS Authorized Department Officer's Designated Representative (ADODR). Reports include:
 1. Narrative accomplishment reports in the frequency and time frame specified in the Notice of Award, Article 4.
 2. Federal Financial Reports, SF-425 (replaces SF-269 October 1, 2009) in the frequency and time frame specified in the Notice of Award, Article 4.

10. Are there any other contributing parties who will be working on the project?

- a. **List Participating Agency/Institution:**
 - KDA
 - USDA-APHIS
- b. **List all who will work on the project:**
 - KDA state entomologist and temporary/seasonal employees
 - USDA-APHIS for funding and support
- c. **Describe the nature of their effort:**
 - KDA-surveying and running traps
 - USDA-APHIS-pest confirmation identification
- d. **Contribution:**

- KDA-surveying
- USDA-APHIS-identification of pests.

C. APHIS Will:

1. Outline the Agency's (USDA APHIS PPQ) substantial involvement.

a. Include any significant Agency collaboration and participation

- Provide any new information that becomes available on pest of concern and traps and lure.
- Provide outreach materials for the Brown Marmorated Stink Bug, if available.
- Provide funds to the Cooperator to cover costs outlined in the Financial Plan.
- Make arrangements for Taxonomic support in identification .

b. Project oversight and performance management

- Review of data results submitted to approved database
- Review data and submit accomplishment reports.
- Provide training, when necessary.

2. What equipment will be needed to perform the work? Include major items of equipment with a value of \$5,000 or more.

a. Will Equipment be loaned or provided by APHIS? ☐Yes ☒No
If Yes, please list:

b. How will the equipment be used? N/A

IV) GEOGRAPHIC LOCATION OF PROJECT

A. Is the project statewide or in specific counties, townships, and/or national or state parks? (List the names of all counties, townships, and/or national or state parks, and tribal areas that apply) Trapping will take place in the north east part of the state. Possible counties: Anderson, Atchison, Brown, Chase, Clay, Cloud, Coffey, Dickinson, Doniphan, Douglas, Franklin, Geary, Jackson, Jefferson, Johnson, Leavenworth, Linn, Lyon, Marshall, Miami, Morris, Nemaha, Osage, Ottawa, Pottawatomie, Republic, Riley, Saline, Shawnee, Wabaunsee, Washington, Wyandotte.

B. What type of terrain (e.g., cropland, rangeland, woodland) will be involved in the project? Many types of terrain from forests, to rural, to urban areas

C. Are there any unusual features which may have an impact on the project or activity such as rivers, lakes, wild life sanctuaries, commercial beekeepers etc? (list all that apply) There could be many unusual features which may have an impact on the project or activity such as rivers, lakes, forests, Indian reservations and wildlife sanctuaries.

D. Identify the kind of data to be collected: The kinds of data to be collected will include, but not limited to, observation number, observation date, data source, state/county, site code, EPA pest code, pest status and survey method.

E. Establish criteria to evaluate the results and successes of the project:

1. Results:

- Pest detection survey activities for the project completed.
- All data collected from the pest detection survey is entered into the IPHIS, if available, if not then NAPIS database.
- Maps of the pest detection survey activities are produced to aid in planning of future pest detection surveys, pathway risk analysis, and outreach activities.
- State CAPS and KDA meetings to keep updated on issues.

2. Successes:

- No pests found that would require regulatory action.
- Identification of high risk areas for the brown marmorated stinkbug.
- Increased knowledge of resource locations.

F. Methodology used to determine if the results and benefits are achieved:

1. Identified needs are met:

- Survey completed in timeframe specified.

2. Results and benefits are achieved:

- Review of the IPHIS, if available, if not then NAPIS database to ensure that data from the pest detection activities have been entered.
- Review the accomplishment reports, supporting outreach materials (if applicable), and maps.
- State CAPS and KDA meetings to keep updated on issues.

V) DATA COLLECTION AND MAINTENANCE

All survey data from cooperative agreements involving pest surveys will be entered by the State Survey Coordinator or KDA staff into a PPQ approved database.

VI) TAXONOMIC SUPPORT

A. Person or Institution that will screen targets (Name & Contact Information)

Entomologist
Kansas Department of Agriculture
Plant Protection and Weed Control

PO Box 19282, Forbes Field, Bldg 282
Topeka, Kansas 66619
(785) 862-2180

OR

B. ☒ Request for taxonomic support.

VII) SIGNATURES

ROAR **Date**

ADODR **Date**

Detailed Financial Plan

PROJECT: Brown Marmorated Stink Bug

COOPERATOR NAME: Kansas Department of Agriculture

AGREEMENT NUMBER: 12-8420-1227-CA

TIME PERIOD: January 1, 2012-December 31, 2012

Financial Plan must match the SF-424A, Section B, Budget Categories

ITEM	APHIS FUNDS	COOPERATOR FUNDS (Show even if zero)	TOTAL
PERSONNEL:			
KDA staff 25 hours @ \$25/hr	0	\$625	\$625
Subtotal	0	\$625	\$625
FRINGE BENEFITS:			
22% of salary of permanent employees	0	\$138	\$138
Subtotal	0	\$138	\$138
TRAVEL:			
Vehicle rental for 7 weeks @ \$300/week**	\$2,100	0	\$2,100
Subtotal	\$2,100	0	\$2,100
EQUIPMENT			
Subtotal	0	0	0
SUPPLIES			
Alcohol, specimen jars, alcohol proof pens, insect repellent, boxes, etc	\$500	0	\$500
Traps	\$1,500	0	\$1,500
Lure	\$400	0	\$400
Fuel 600 miles/15mpg x \$3.75/gallon (600 miles/week x 7 weeks)**	\$1,050	0	\$1,050
Subtotal	\$3,450	0	\$3,450
CONTRACTUAL			
Key Staffing (temporary staff) \$20.00 x 240 hours	\$4,800	0	\$4,800
Subtotal	\$4,800	0	\$4,800
OTHER			
Shipping	\$200	0	\$200
Subtotal	\$200	0	\$200
TOTAL DIRECT COSTS	\$10,550	\$763	\$11,313

INDIRECT COSTS (21.80% on Total Direct Cost of salary and fringe benefits)*	0	\$166	\$166
TOTAL	\$10,550	\$929	\$11,479
Cost Share Information	92%	8%	

* Kansas' Negotiated Cost Rate (Salary + Fringe Benefits x %=Indirect Cost)

** There is a shortage of state vehicles. We give the option of renting a vehicle or using personally owned vehicles. If renting we pay for the fuel and if a personal vehicle is used we pay mileage.